Environmental History

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Introduction

There is more to social and cultural history than people and ideas. The range of chapters in this volume – particularly those on animals, material culture and space – show the large variety of topics that can be integrated with the social and the cultural. Environmental history differs from other forms of historical enquiry as it pays as much critical attention to the non-human world as it does to the human. Whereas other historical endeavours treat the natural world as a 'passive backcloth against which human history is acted out', environmental history seeks to show how humans and their surroundings both play an active role in shaping history.[1] This chapter offers an overview of some of the most important recent developments in environmental history, and points to some ways in which they might stimulate, provoke and invigorate social and cultural history.

Exactly when, where and through whose genius environmental history came into being is contested among environmental historians. The division among scholars as to the origin of this comparatively young field is relatively straightforward. North American scholars typically date its inception to the 1960s and 70s, and often the work of Roderick Nash, who in 1970 offered the first recognisable undergraduate course in environmental history – despite a lack of literature with which to furnish his students.[2] From Nash's first forays sprung a small cluster of historians, many of whom are still the leading lights of environmental history today – William Cronon, Carolyn Merchant, Donald Worster and several others. It was this small band of scholars that would meet at American Historical Association conferences, and go on through their writing and graduate supervision, to sow the seeds of the field that we recognise today.

Outside of North America, the story is much older and much less clear. Environmental historians have claimed a number of scholarly traditions to be their intellectual forbears. Foremost among these have been natural history, historical geography, and landscape history, the developments of which from the second half of the nineteenth century onwards have been credited with being environmental history, *avant la lettre*.[3] European and colonial scholars, rather than their later American colleagues take centre stage in these origin stories.[4] Furthermore, rather than America being the focus of historical study, Europe and the lands Europeans colonised are the focus of attention.[5] Regardless of who got there first, environmental history began to flourish as a self-conscious discipline after 1970. Most of its growth took place in the United States, where environmental history continues to enjoy significant institutional backing, in the form of dedicated chairs in environmental history and the American Society for Environmental History, with its well-attended annual conference and high-impact journal, *Environmental History*. Elsewhere, environmental history enjoys scholarly representation in societies in Latin America and the Caribbean, East Asia and Europe, as well as in a number of specialist journals.

This small diversity of origin stories is utterly eclipsed by the diversity of environmental historians' methodologies and subjects. The sheer breadth of environmental history has seen it labelled as less a discipline and more an interdisciplinary project.[6] Judging by the sheer number of essays reviewing and reflecting on the field as a whole produced over the last forty years, environmental history seems to have been constantly at a crossroads. Two clear paths emerged in the 1990s – materialism and idealism – as part of the general upheaval of the cultural turn in historiography. Yet beyond this, scholars have been content to follow their noses in an enormous number of directions, often at great speed.[7] A glance at the programme for the most recent World Congress of Environmental History in 2014 shows papers by ecologists, historical fluviomorpohlogists, art historians and economists, and many

more. This range of almost incommensurable studies, stretching in one direction from big-data reconstructions of past climatic phenomena, to the textual study of perceptions of specific flora and fauna, has led Harriet Ritvo to refer to environmental history as an 'unevenly spreading blob'.[8] Yet the field is spreading with considerable exuberance, much of which has come from methodological pluralism, and the field stands today like a 'dynamic mongrel… an offspring whose hybrid vigour is greater than that of its disciplinary parents'.[9]

In response to the breadth of the scope of environmental historians' inquiries, several scholars have attempted to schematize how environmental history is (or should be) conducted. Donald Worster has proposed three levels of analysis that all environmental history should seek to cover: nature and its impact upon society, social and economic relationships arising from environmental adaptations, and mental and intellectual interactions with nature.[10] J. Donald Hughes has defined the three themes of environmental history as environmental factors' influence on human history, human caused environmental change, and ideas about the environment.[11] John McNeill also identifies three types of environmental history – the physical, the cultural and intellectual, and the political.[12] Carolyn Merchant deliniates five ways of doing environmental history: by focussing on 'biological interactions between humans and the natural world', by considering the different distinct 'levels' of interactions between people and the natural world (material conditions, production, reproduction and representation), by studying environmental political movements, by focussing on ideas about nature, and by analysing the way environmental change is narrativised.[13] No study would or could attempt to consider all of these levels together. What they show is that while significant sections of the field are concerned with social and cultural research, others remain relatively undisturbed by it.

All of this at times disparate research does, however, coalesce around one theme: the environment. Whereas once environmental historians were content to speak of 'nature', they

now speak more readily of environments. The study of 'nature' is still an important part of environmental history, and foundational texts in the field such as Clarence Glacken's *Traces on the Rhodian Shore* look specifically at nature.[14] Yet nature is not everything. The environment is distinct from nature in that it is produced through the actions of humans. As Sverker Sörlin and Paul Warde write, 'nature needs no humans' and has existed and will exist without them. Environments exist 'only where humans live and where humans have entered into a self-conscious relationship with their surroundings.'[15] This relationship is vast, and has been hidden or ignored by the categories of 'man-made' and 'natural'. As Raymond Williams observed, all environments are a product of our interaction with the world, both coal mines and slag heaps, fields and moors: 'In this actual world there is then not much point in counterposing or restating the great abstractions of Man and Nature.'[16] Societies are then involved in a constant process of 'environment-making' through their relations with the world around them.[17] Environmental historians therefore study 'the entangled connections between the natural and the cultural', uncovering the natural in the cultural and the cultural in the natural.[18] Narrative in environmental history has to deal with this. We should not 'begin with nature and add people', we must 'begin and end with humanity sited on the land.'[19]

This way of understanding the environment as an 'entanglement' of humans and their surroundings has significantly muddied what might appear to be the logical focus of environmental history – humans and the 'natural world'. However, as environmental historians increasingly demonstrate in their research, not all that is environmental is green. Whilst identifiably 'natural' topics preoccupied earlier generations of scholars – national parks, rivers, forests – contemporary scholarship ranges across a variety of topics. Ellen Stroud has argued that we should look less *at* the natural world and instead ask questions *with* the ubiquitous aspects of 'nature' we find in the seemingly most unnatural of places. Thus a history of national parks should be less about the parks as self-evidently natural sites, but

about their constitutive non-human elements – their dirt, plants, animals – and how they inform the history of the national park. Such questions – about the role and influence of dirt, plants and animals – should also be asked of the urban sewer, the public housing project and the business deal struck on the golf course. Such perspectives afford us new environmental insights into seemingly familiar areas, and expand the purview of environmental history beyond 'pristine nature'.[20] Such a 'de-romanticization' of the category of 'natural-ness' can both help us see the natural in unfamiliar places, as well as deconstruct received images of particular 'natural' sites.[21] Recent studies have urged us to consider how 'Man, not God' made the English countryside, and how we might find environmental history in the distinctly man-made landscape features of the canal and the railway.[22] We have also learned how seemingly riven and barren military sites can be havens for wildlife, how No Man's Land can in fact be 'Many Creatures' Land'.[23] As Donald Worster argued, we can do environmental history in an almost unlimited number of places, from the high plains of the cattle rancher, to the supermarket of the industrial worker, and as in one recent study, even inside the tax system.[24] To understand this we are required to realise that 'each of our activities, however mundane, is ecological.'[25]

The diversification of subject matter, and the move towards studying the environments *of* things rather than the environment *as* things has been driven by a blurring of the boundaries between the natural and the social. This has been in part due to the retheorisation of the 'natural', and in part due to new epistemological uncertainties within the science of choice for much early environmental history: ecology. The ecology that proved so influential among environmental historians of the 1970s stressed the importance of 'climax vegetation' and 'natural stability'.[26] In these models, left to its own devices, nature found a sustainable equilibrium in its plant and animal communities, which without exogenous interruption, would continue *ad infinitum*. With this understanding of nature behind them,

early environmental histories adopted what William Cronon has termed a 'declensionist' tone.[27] That is, they were pessimistic, contrasting varying degrees of 'pristine nature' with the effects of human intervention, which were almost universally deleterious: as soon as the social interacted with the natural, the natural declined. Yet, as historians adopted ecological perspectives, the same perspectives fell out of scientific favour. Ecology began to be conceptualised less as a fixed set of laws, and more as a set of shifting contingencies.[28] What environmental historians took to be a solid base on which to build their studies 'turned out to be a swamp'.[29] From the 1970s onwards, ecologists increasingly came to see populations of plants and animals as historically contingent, to the extent that ecology has been characterised as a 'branch of history', and no more or less scientific than history.[30] As one ecologist succinctly puts it, nature is 'always changing.'[31] Narratives of decline based on the premise that pre-social nature is somehow harmonious are no longer tenable.

Other sciences have come to preoccupy environmental historians. Geoff Eley remarked that the survival of history as a discipline will be achieved only by continual 'cross-border traffic' between itself and other disciplines.[32] Environmental historians have been some of the most open and adventurous traders across disciplinary boundaries, venturing most frequently into the physical sciences. While Emmanuel Le Roy Ladurie praised the climate historian's ability to 'export invaluable information across his frontiers', providing exact dating for the rough chronologies sketched by carbon dating, environmental historians today are net importers of scientific material.[33] Recent assessments of the state of environmental history have praised and encouraged historians' increasing engagement with the sciences.[34] Environmental historians' frequent use of data from the physical sciences makes them well placed to continue interdisciplinary conversations using 'bio-' and 'geo-archives'.[35] However, whilst some scholars embrace this new positivism as bringing greater

political neutrality, others are keen to remind their colleagues that science does not provide a neutral window on the past and are critical of is claimed explanatory power.[36]

New Directions for Social and Cultural History

Environmental history then appears to offer both opportunities as well as threats to social and cultural history. Depending on where in this enormous field one sows their intellectual seeds, the social and the cultural is either set antagonistically against environmental forces which drive change and stasis, or society and culture are seen as co-constructing environments with nature. In this section I point to some of the most fertile areas that social and cultural historians might choose to exploit, as well as some adaptive strategies to be used in more hostile terrain.

If environmental history is to become a new direction for social and cultural historians, they will find themselves confronted with the provocation that the social and the cultural are not everything. Environmental history seemingly fundamentally challenges social and cultural history by decentring the human in historical narratives. The most digestible form of this observation is that humans are not alone. We are but one influence, one species on a planet of millions, or in the more radical formations, no clear species at all, and just another unstable part of the socio-natural world. Accepting that we are not special, that we work with plants, animals, weather and landscape is relatively uncontroversial and such a position is adopted in historical uses of Actor Network Theory. Less palatable for social historians is the charge that earthly forces hold some deterministic sway over social phenomena. Some of the most influential works of environmental history have placed bacteria, climate and other species as the protagonists at the heart of their narratives, with human beings providing supporting roles. Alfred Crosby has done most to promote the

agency of these non-human forces. His *Columbian Exchange* (1972) and *Ecological Imperialism* (1986) identified the unintentional but devastating impact of the spread of 'Old World' plants, animals and diseases across Europe's colonies as one of the central impacts of colonialism – man's intentional and unintentional actions in the 'New World' killed off more species in four hundred years than evolution would in a million.[37] Elsewhere, historians have focussed on exogenous shocks as the drivers of change.[38] More recently, Bruce Campbell has sought to place 'nature' in general back as a central 'historical protagonist in its own right', a position supported in studies proposing a causal relationship between weather and famine, climate and plague, and climate change and war.[39]

The motive power granted to environmental phenomena by many of these historians is a far cry from the crude determinism for which it is sometimes mistaken. Whilst early attempts to link climatic phenomena to historical change emphasised the impersonal forces of climate and global temperatures, these were met with considerable scepticism.[40] The problematisation of the environmental allows us to understand these proposed forces in new ways. Environmental historians can robustly demonstrate continuity or change in particular environmental conditions (and they do not always do this robustly).[41] This can offer us one explanation among many as to why change or stasis occurred in society, yet social and cultural history can explain why *specific forms* of change or stasis occurred rather than just why change in general occurred. To gain a fully rounded view of the specificities of processes of change we should also recognise how societal and cultural phenomena are inextricably woven into their environments. Thus socio-environmental history can best engage with the agency of the non-human, by placing it among the host of other agencies and contexts that come between 'cause' and 'effect'.

Environmental historians have started to blend social history into recent studies of historical sustainability. Recognising that the verb *to sustain* is transitive, environmental

historians have begun to ask ‘who, or what, sustains who or what?’, and have enlisted the concept of the ‘socio-environmental metabolism’ in their search for answers. Socio-environmental metabolism refers to exchanges between material resources and people, in particular the ways in which ecologies and social organisation interact.[42] In this model, societies are more or less explicitly, ‘vitally concerned with the organization of flows of materials and energy between themselves and nature’.[43] The social element of this metabolism is the way in which a society is organised to regulate these material and energy flows.[44] Such flows can then be managed through two principle levers – altering the quantity of material and energy available, and altering the ways in which it is distributed. We can thus say that a society is sustained by a given set of material and calorific inputs distributed by a specific set of social practices. A concrete example of this would be communities subsisting on cereal farming, and the specific divisions of labour involved in the sowing, reaping and transformation of those cereal grains, and the mechanisms for their distribution. Both the resource endowment of a community and the management of that resource maintain the society. Exactly who or what is sustaining such an arrangement is to be found in the ways in which people and their environments are organised, which can have both positive and negative impacts on both people and the world around them. In relation to urban socio-environmental metabolisms, geographer Erik Swyngedouw has argued that there is ‘no such thing as an unsustainable city in general, but rather there are a series of urban and environmental processes that negatively affect some social groups while benefiting others’, and therefore we must ask ‘who gains and who pays’?[45] Socio-environmental metabolisms ‘produce a series of both enabling and disabling social and environmental conditions’, and while ‘environmental (both social and physical) qualities may be enhanced in some places and for some people, these often lead to a deterioration of social and physical conditions and qualities elsewhere.’[46]

Thus, ‘processes of socio-environmental change’ are 'never socially or ecologically neutral.’[47] All environmental struggles and stories should then be seen as struggles and stories about power, which at the level of the state can involve the disadvantaging or death of millions of people in extreme situations. As Douglas Weiner observes, ‘every figuration of the “environment”—by distributing different opportunities for environmental access and decision-making power to different “types” and groups—potentially encodes exclusion, dispossession, or even genocide.’[48] From this perspective, there are then many opportunities for social historians to make significant use of environmental history. Social historians’ ability to unpick the sedimentary layers of societies and recognise their fault lines along divisions of class, race, gender, age and more make them exceptionally well placed to engage in the analysis of socio-environmental metabolisms and expose where and why benefits and burdens fall.

This ability to disaggregate societies can benefit both social and environmental historians in a second way. Summing up the development of the field in 1990, William Cronon pointed to environmental historians’ holism when analysing the relationship between societies and environments, thus failing to ‘probe below the level of the group’.[49] Where environmental historians ‘lump’ together people into environmentally impactful groups, social historians ‘split’ these groups down into their constituent subjective elements.[50] In recent years, environmental historians have moved beyond generalisations about groups and their relationships to the natural world to uncover the different relationships to nature that exist throughout different groups. For example, historians once portrayed the people of pre-Columbian North America as ‘ecological Indians’, harmoniously cohabiting with nature. The myth of indigenous people living in a prelapsarian state, preserving a pristine nature that Europeans then desecrated has been replaced with the acknowledgement that ethnically, linguistically and culturally diverse peoples of pre-Columbian North America had shaped

their environments for centuries, bending nature to their will, and themselves being bent back by its.[51] These multiple peoples created, sustained and altered their environments in multiple ways, each of which was contingent on their own particular historical, climatological and geographical contexts. Yet, as Peter Coates has observed, such critical reappraisal has not extended to all past societies. Medieval and early modern societies have been idealised as harmoniously cohabiting with the natural world, sustained by 'indigenous' knowledge and communal access to resources which 'operated smoothly for centuries before the indigenes were displaced or marginalized by outsiders armed with alien views and technology.'[52] One early modern environmental history went so far as to suggest that before the demographic changes of the sixteenth-century, the people of the Forest of Arden lived 'in a balanced relationship with their environment', in a state of 'ecological equilibrium'.[53] Social historians are well aware of tensions over resources in early modern communities and their cultural expression, yet these have not been adequately addressed from an environmental perspective. With some notable exceptions, there are relatively few works of early modern social and cultural environmental history.[54] Socially-situated environmental histories of the early modern period are required to redress this balance, and rescue the commoner and the parish constable from the enormous condescension of ecology.

If social history can add texture and nuance to the broad, systemic perspective of environmental history, then environmental history can provide angles on traditional themes in social history. The study of inequality and the development of capitalism has recently been reinvigorated by environmentally focussed research. In a series of studies of storm flooding in the North Sea area in the late middle ages, Tim Soens has shown how uneven property distribution and wealth inequality generated flood disasters due to failures in flood defence provision.[55] Emanuela Guidoboni has also shown how the economic and demographic chances taking place in sixteenth-century Italy contributed to increased flooding in the lower

Po Plain through anthropogenic landscape change.[56] Amartya Sen's entitlement concept has proved useful for historians of flooding and famine to show how a variety of disasters were the results of 'entitlement failures', rather than the results of 'exogenous' factors.[57] Elsewhere, inequality has been shown to have been a crucial variable in the ability of settlements to withstand environmental and other crises across the pre-industrial era.[58] These histories have made as much use of traditional social history as they have of environmental history, drawing on classic debates in social history like the Brenner debate.[59] Studies have used environmental shocks like large floods to test Brenner's thesis about the accumulation and consolidation of landholding and the development of capitalism.[60] In these examples, social-historical analysis has been used to show some of the profound environmental impacts of seemingly social phenomenon like property distribution and wealth inequality, and from the opposite perspective, how environmental shocks can intrude into classic narratives in social history.

Class and race provide familiar themes around which social and environmental historians can converse. In *The Republic of Nature,* Mark Fiege recounts the environmental consequences of US race legislation. Mapping the cold, wet and frequently dangerous journey of eight year old Linda Brown to school every morning, Fiege shows how race and racial policy structured the environment in which Brown grew up, and made the colour line as much a physically lived and felt set of boundaries as a legal code. Opposition to the environmental inequalities faced by African American school children on their morning commute helped foster sustained action against the colour line, resulting the famous case *Brown vs. Board of Education of Topeka* in 1954.[61] Sylvia Hood Washington traces the genesis of insidious 'environmental racism' in nineteenth- and twentieth-century Chicago. She reveals how in the early twentieth century, white perceptions of African American migrants as unhealthy 'nuisances' led to their segregation and settlement in environmentally

degraded urban spaces, entrenching endemic disease and perpetuating a cycle of marginalisation.[62] Scholars in the United States have thus led the way in exposing environmental inequality using a social and environmental approach, yet there remain significant opportunities to explore this in other contexts.

To fully explore the implications of an attention to race in environmental history, we need to understand not only how race influenced the experience of environments, but how the construction of environments in general has been historically bound up with race. American scholars have demonstrated how nineteenth-century conservationists 'whitened' the wilderness they sought to save by omitting agential non-white actors from their visions and descriptions of it.[63] Yet we need more studies of how environments in other national and international contexts were constructed along racial lines. Wilko Hardenberg and Marco Armiero have shown how in 1930s Italy, fascist ideals of race, nation and history were 'steeped in nature', despite the 'natural' in which they invested so much being almost entirely manufactured. Malarial wetlands and open mountainsides were not part of the fascist conception of Italian nature, however, drained lowland plains and regulated rural landscapes were. Idealised fascist nature had to be manufactured, often at the expense of existing landscapes, flora and fauna, revealing the interplay between identity, ideology and the environment, and the impacts each might have on each other.[64] Likewise, in 1930s northeast England, a much smaller and utterly ineffective scheme to 'reclaim' and resettle moorland in Cleveland was driven by a fusion of ecologism and a belief that 'pure-bred Englishness resided in indigenous rural populations' whose interests were best served by an oligarchy of the landed elite.[65] Contemporary rural studies have shown how the English countryside is a racialized 'white' space, and how marginal groups are required to perform a particular kind whiteness to be accepted within it.[66] Social and cultural historians can reveal much longer histories of the relationships between race, class, identity and environment. They might look

to the processes preceding those described in 1930s Italy and England, and begin with the characterisation of English wetland inhabitants as 'rude, and almost barbarous, sort of lazy and beggarly people' with 'Souls of Sedge' in seventeenth-century agricultural improvement literature.[67]

Class, and particularly labour, have important and under-explored environmental dimensions. Work has been said to be 'the single most important interface between society and nature'.[68] In his study of the great organic machine, the Columbia River, Richard White noted that those that lived and worked with the river 'felt [it] in human bones and sinews', and 'knew the river through the work the river demanded of them'.[69] An environmental approach brings with it new possibilities for affective histories of work. An environmental history of class is implicit in some of the earliest works of Marxist literature. Engels was alive to the environmental inequalities inherent in the class system. He observed 'the pestilential air and the poisoned water' of working-class districts in northern industrial towns, and the greater exposure of working class homes to flooding along the rivers Irk and Medlock.[70] In 1906, the San Francisco earthquake disproportionately affected the working-class South of Market district, in which cheap, wood-construction homes built on land hastily reclaimed after a previous earthquake were destroyed when the land beneath them began to shake like 'jelly in a bowl'.[71] In these and other examples, historians have then shown how social class is bound up with particular environmental experiences.[72]

Yet environmental history can offer us a new perspective on histories of social class. Recent protests over the introduction of charges for water in Ireland demonstrate how concern over the provision of basic environmental needs can cause unexpected shifts in political opinion and association.[73] For Ulrich Beck, modern environmental risks cut across class boundaries because whilst 'poverty is hierarchic, smog is democratic.'[74] But as Timothy Cooper and Sarah Bulmer have recently noted, the perception of certain risks is still mediated

through everyday interactions with them, which are themselves bound up with social relations and the subjective experience of class identity.[75] Likewise, studies of working-class engagement with environmental movements have shown that environmental consciousness is prevalent across classes, yet those classes affect the ways in which people have historically engaged that consciousness.[76] Whilst environmental issues can re-orient class relationships in certain circumstances, social history can provide a corrective to at times totalising environmental discourses.

Environmental approaches also have the capacity to reveal new connecting threads in historical narratives that reorient our focus and shed light on previously unseen commonalities and alliances. The 'slow violence' of climate change is driving new political movements amongst the world's poor, who find themselves environmentally marginalised and on the myriad front lines of environmental change.[77] Environmental historians are increasingly turning to 'glocal' perspectives to study the far-reaching and long-range flows of energy, power, resource and influence as they move through local case studies.[78] Going even further, Jason W. Moore has proposed a world-ecological approach to history in which our notion of scale is utterly disrupted. Moore seeks to show that the double internality of nature-in-society and society-in-nature renders capitalism a 'place' in its own right, unable to be grasped at either the local or the global scale.[79] Each of these environmental perspectives challenges a traditional focus on the community, the region or the country. They show that when thinking with the environmental, we are forced to reconsider scale and should move beyond purely social or cultural human boundaries.

Social, cultural, and environmental history have all drawn considerable inspiration and motivation from political movements contemporary to their growth in the second half of the twentieth century. While the rise of social history is inextricably bound up with the cultural and political changes of the 1960s, environmental history drew a great deal of energy

from the environmental movement, following the publication of Rachel Carson's *Silent Spring* in 1962 and the first 'Earth Day' in 1970. In a world dominated by the all-pervasive threat of climate change, social and cultural history will, perhaps counterintuitively, become increasingly important. Predictions of the future impact of climate change on societies paint an almost universally bleak picture of conflict, forced migration, hazard and insecurity. Such predictions rely on climate as the 'dominant predictor variable' and, as Mike Hulme has argued, 'reduce the future to climate change', assuming complete stasis in social, cultural, economic and political life.[80] Other possible futures still exist, with changing climatic parameters, but with vastly different social outcomes predicated on action taken in the social sphere. Social and cultural historians are well placed to offer critiques of these anti-social narratives, and some have done so implicitly. Seth Garfield has shown how migration following droughts in Brazil in 1941-43 was guided by social and familial networks, perceived economic incentives and gendered and generational expectations, rather than the result of a simple environmental push factor.[81] Responding to a large number of scholarly and popular perceptions of the relationship between pandemics and hatred, Samuel Cohn has shown, against scholarly orthodoxy, that there is no deterministic link between epidemics and hatred or violence. Instead, reactions to those afflicted were socially and culturally contingent, across both space and time.[82] Social and cultural history has a crucial role to play in these stories. They show us that change as a result of environmental degradation is not determined. Things can be different – we just need better stories to think with. If historians are to help shape a future that is not just 'reduced to climate', we need to keep grappling with a question posed by Marc Bloch in *The Historian's Craft*: 'Does the physical ever affect the social, unless its operations have been prepared, abetted, and given scope by other factors which themselves have already derived from man?'

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